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(71) Applicant (for all designated States except US): **BAE SYSTEMS INFORMATION AND ELECTRONIC SYSTEMS INTEGRATION, INC.** [US/US]; 65 Spit Brook Road, NHQ01-719, Nashua, NH 03061 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DION, John**

[US/US]; 114 South Street, Pepperell, MA 01463 (US).
CARLSON, Mark, A. [US/US]; 20 Cricket Hill Road, Amherst, NH 03031 (US).

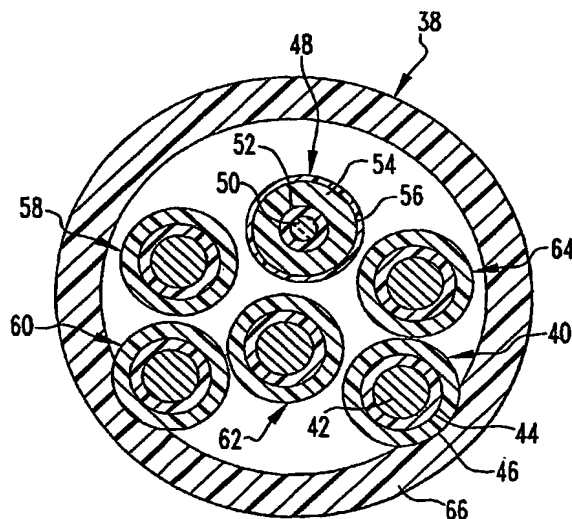
(74) Agent: **LONG, Daniel, J.**; BAE Systems Information and Electronic Systems Integration Inc., 65 Spit Brook Road, NHQ01-719, Nashua, NH 03061 (US).

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[Continued on next page]

(54) Title: **ELECTRO-OPTICAL CABLE FOR USE IN TRANSMISSION OF HIGH VOLTAGE AND OPTICAL SIGNALS UNDER EXTREMES OF TEMPERATURE**



(57) Abstract: An electro-optical cable (38) which includes an optical element (48) having an elongated glass fiber core (50), a medial cushioning layer (54) concentrically surrounding the glass fiber core, and an outer hard shell (56) material surrounding the medial cushioning layer. The cable also includes at least one electrically conductive element (40) comprising an elongated conductive core (42) and a dielectric layer (44) concentrically surrounding the electrically conductive element.



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- with international search report
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/37435

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G02B 6/44

US CL : 385/101

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 385/100-114,123,128

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,002,359 A (SAYEGH) 26 March 1991 (26.03.1991), see entire document.	17-20
Y		1-16
Y,P	US 6,600,108 B1 (MYDUR et al) 29 July 2003 (29.07.2003), column 4 and column 6 line 56-column 7 line 22.	1-16

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

Sarah Song

Telephone No. 703-308-0956

INTERNATIONAL SEARCH REPORT

PCT/US03/37435

Continuation of B. FIELDS SEARCHED Item 3:

USPTO EAST

search terms: PTFE, TEFLON, polytetrafluoroethylene, PEEK, polyetheretherketone, cable, electr\$ with optic\$, polyimide